

Note to NMSC:

February 25, 2002

From: Rich Scheffe

Subject: Review materials for March 4,5 NMSC meeting

Attached for your review prior to the meeting are the following materials. Those materials **marked bold** are recommended as minimum reading, given the length of all the attached documents.

1. Agenda
2. Committee membership list
3. **List of objectives**
4. **Issues for discussion**
5. Status reports of three workgroups (QA, regulatory and technology)
6. Latest air toxics monitoring guidance
7. **Section 4 of the monitoring strategy...NCore**
8. Second draft of monitoring strategy document (includes Section 4).

These material will posted on AMTIC (private site): <http://www.epa.gov/ttn/amtic/stratdoc.html>

The strategy document is a very rough draft that requires harmonization among the various sections. For this meeting, I have recommended that you focus on section 4 as much of the meeting will address NCore. During the morning session I will brief you on all elements of the strategy. A rough guide to the document:

Section 1...background and objectives for the strategy

Section 2..Objectives for air monitoring and priorities set by NMSC

Section 3...network assessments including guidance for conducting these assessments (this section is largely a packaging of national and LADCO/Region 5 assessments as well description of available (or soon to be) tools);

Section 4...NCore

Section 5...QA....note resource implications/recommendations in this section

Section 6....Technology....general information

Section 7...Monitoring Methods...a first cut at trying to provide overview of “readiness” of certain methods for routine use...general information;

Section 8.Regulations...currently an overview of the process...**workgroup has not yet released proposal...will base on outcome of this meeting**

Section 9.. Communications..currently very minimal....this will need attention, as it potentially will be a very useful piece to cover an avalanche of questions and concerns..

Section 10...Resources/funding strategy...same as above

Draft Agenda
National Monitoring Strategy Meeting
Dallas, Texas (EPA Region 6)
March 4 (10 am) - 5 (12 noon), 2002

March 4

10 am Introductions, Meeting Purpose

Meeting expectations

10:15 Summary of NCore subgroup activities

10:30 Overview of Monitoring strategy and document

 NCore strawplan

12:00 lunch

1:00 NCore issues discussion

2:45 -3:00 break

5:30 adjourn

March 5

8:00 am

 NCore discussion continued

10-10:15 break

11:00 Summary and next steps

12:00 Adjourn

NATIONAL MONITORING STRATEGY COMMITTEE

NAME	ADDRESS	PHONE	FAX	E-MAIL	ALTERNATE
Charles Pietarinen	Chief, Bureau of Air Monitoring New Jersey Dept. of Environmental Protection P.O. Box 418 Trenton, NJ 08625-0418 FEDEX ADDRESS: New Jersey Dept. of Environmental Protection 401 E. State Street, 7 th Floor Trenton, NJ 08625-0418	609/633-7648	609/633-6198	cpietarinen@dep.state.nj.us	
Mike Koerber	Lake Michigan Air Divisions Consortium 2250 East Devon Avenue, #216 Des Plaines, IL 60018-4509	847/296-2181	847/296-2958	koerber@ladco.org	
Steve Spaw	TNRCC (MC-165) Monitoring Operations Division P.O. Box 13087 Austin, TX 78711-3087 FEDEX ADDRESS: TNRCC Monitoring Operations Division MC 165 12100 Park 35 Circle Austin, TX 78753	512/239-1700	512/239-1605	sspaw@tnrcc.state.tx.us	
Mel Zeldin	526 St. Andrews Street Ontario, CA 91761	775/424-5274	775/424-5274	mzeldin45@earthlink.net	
Dennis McLerran	Puget Sound Clean Air Agency 110 Union St Suite 500 Seattle WA 98101-2038	206/689-4004		dennism@pscleanair.org	Mike Gilroy
Geri O'Sullivan	STAPPA/ALAPCO 444 North Capitol Street Washington, DC 20001	202/624-7864	202/624-7863	gosulliv@sso.org	

NATIONAL MONITORING STRATEGY COMMITTEE

NAME	ADDRESS	PHONE	FAX	E-MAIL	ALTERNATE
David Mobley	<p>Acting Director Emissions, Monitoring, & Analysis Division (C304-02) U.S. EPA Research Triangle Park, NC 27711</p> <p>FEDEX ADDRESS: USEPA (C304-02) 4930 Old Page Road Research Triangle Park, NC 27709</p>	919/541-4676	919/541-2357	mobley.david@epa.gov	
Rich Scheffe	<p>Leader, Monitoring & Quality Assurance Group (C339-02) U.S. EPA Research Triangle Park, NC 27711</p> <p>FEDEX ADDRESS: USEPA (C339-02) 4930 Old Page Road Research Triangle Park, NC 27709</p>	919/541-4650	919/541-1903	scheffe.rich@epa.gov	
Jack Broadbent	<p>Jack Broadbent, Director, Air Division EPA Region IX 75 Hawthorne Street San Francisco, CA 94105</p>	415-744-1294	415/744-1077	broadbent.jack@epa.gov	John Kennedy
Sally Shaver	<p>Director, Emissions Standards Division (C504-03) U.S. EPA Research Triangle Park, NC 27711</p> <p>FEDEX ADDRESS: USEPA (C504-03) 4930 Old Page Road Research Triangle Park, NC 27709</p>	919/541-5572	919/541-0072	shaver.sally@epa.gov	Ted Palma

NATIONAL MONITORING STRATEGY COMMITTEE

NAME	ADDRESS	PHONE	FAX	E-MAIL	ALTERNATE
Joe Paisie	Leader, Integrated Strategies Group Air Quality Strategies and Standards Division (C504-02) U.S. EPA Research Triangle Park, NC 27711 FEDEX ADDRESS: USEPA (C504-02) 4930 Old Page Road Research Triangle Park, NC 27709	919/541-5556	919/541-0804	paisie.joe@epa.gov	
Rose Lee	Yakama Nation Environmental Program P.O. Box 151 Toppenish, WA 98948 FEDEX ADDRESS: Yakama Nation Environmental Program - Air Section 401 Fort Road Toppenish, WA 98948	509/865-4565	509/865-5121	rose@yakama.com	
Dwayne Beavers	Cherokee Nation Office of Environmental Services P.O. Box 948 Tahlequah, OK 74465 FEDEX ADDRESS: Cherokee Nation Office of Environmental Services 115 W. North Street Tahlequah, OK 74464	918/458-5496	918/458-5499	dbeavers@cherokee.org	
B. Bobby Ramirez	Air Quality Engineer Salt River Pima-Maricopa Indian Community 10,005 E. Osborn Road Scottsdale, AZ 85256	480/850-7262	480/850-7366	bob.ramirez@saltriver.pima-maricopa.nsn.us	

NATIONAL MONITORING STRATEGY COMMITTEE

NAME	ADDRESS	PHONE	FAX	E-MAIL	ALTERNATE
William M. Auberle	Dept. of Civil and Environmental Engineering College of Engineering & Technology Northern Arizona University P.O. Box 15600 Flagstaff, AZ 86011 FEDEX ADDRESS: Dept. of Civil and Environmental Engineering College of Engineering & Technology Northern Arizona University 15600 S. McConnell Drive, Bldg. 69, Rm 232 Flagstaff, AZ 86011-1560	520/523-5845	520/523-2300	william.auberle@nau.edu	
Dick Valentinetti	VT Agency of Natural Resources Air Pollution Control Division 103 South Main Street Building 3 South Waterbury, VT 05676	802-241-3840	802/241-2590	dickv@dec.anr.state.vt.us	
John Bachmann	Office of Air Quality Planning and Standards (C404-04) U.S. EPA Research Triangle Park, NC 27711 FEDEX ADDRESS: USEPA (C404-04) 4930 Old Page Road Research Triangle Park, NC 27709	919/541-5359	919/541-7925	bachmann.johnd@epa.gov	
Joellen Lewtas	US EPA NERL (MD-77) Research Triangle Park, NC 27711 FEDEX ADDRESS: USEPA (MD-77) 4930 Old Page Road Research Triangle Park, NC 27709	206-553-1605	206/553-0119	lewtas.joellen@epa.gov	Paul Solomon Leon Walsh Tim Watkins Jim Vickery

NATIONAL MONITORING STRATEGY COMMITTEE					
NAME	ADDRESS	PHONE	FAX	E-MAIL	ALTERNATE
Ron Rothacker	CARB P.O. Box 2815 Sacramento, CA 95812 FEDEX ADDRESS: CARB 1001 I Street Sacramento, CA 95812	916/324-7672	916/327-8524	rrothack@arb.ca.gov	

Objectives of the National Monitoring Strategy

- To manage the nation's air monitoring networks in a manner that addresses the most pressing public health issues, optimizes efficiency, and accommodates future needs, all within the constraints of the available funding.
- To establish a new air monitoring paradigm coupling a minimum level of required national monitoring with flexible state/local/tribal air monitoring networks in order to efficiently and effectively meet both national and state/local/tribal needs.
- To provide a greater degree of timely (e.g., real-time) public air quality information, including the mapping of air pollution data, and air quality forecasts.
- To promote network efficiencies through the reevaluation of regulations and quality assurance procedures.
- To foster the utilization of new measurement method technologies.
- To provide a mechanism for the periodic assessment, from both a national and local/regional perspective, of all air monitoring activities to help ensure the relevance and efficiency of the network. (This mechanism should provide appropriate flexibility to disinvest in monitoring activities should changing priorities so warrant.)
- To encourage multi-pollutant measurements, where appropriate, for better air quality management and scientific/health-based data sets.
- To provide a base air monitoring structure which, in conjunction with special studies (not part of this strategy), could be used to support certain regulatory needs, e.g., SIP development, source apportionment, operational model evaluation, and tracking progress of emissions reduction strategies.
- To develop and implement a major public information and outreach program as an important cornerstone toward network changes.
- To seek input from the scientific community as to the merit/value of proposed changes.
- To provide air monitoring platforms and data bases which can be used for other environmental purposes, such as area-based ecosystem assessments, global issues, diagnostic research, and biological sensing.
- To assess, periodically, funding levels needed to maintain support for this monitoring strategy, and incorporate recommendations into the budget planning process.

Attributes of NCore

- To satisfy the minimal level of national air monitoring needs, including:
 - real-time input of data from across the country (e.g., AIRNOW) using continuous technologies for timely dissemination to the public:
 - spatial mapping
 - public health advisories
 - public air quality forecasts
 - emissions strategy development
 - routine/operational model evaluation
 - observational and source apportionment techniques
 - tracking air quality trends and progress
 - accountability of major national emissions strategies
 - health/welfare assessments (e.g., for HAPS, visibility)
 - NAAQS determinations (i.e., compliance with standards)
 - defining nonattainment and emissions strategy regions
 - health assessments that influence periodic NAAQS reviews (i.e., 5-yr EPA review process)
- To provide a consistent national network of multi-pollutant measuring sites.
- To provide consistent air quality information for both urban and rural areas.
- To provide a basis from which the augmentation by state/local/tribal monitoring networks can be utilized to meet state/local/tribal monitoring priorities.
- To accommodate the national needs for monitoring new pollutants (e.g., air toxics).
- To maximize leveraging of existing air monitoring sites, especially those with multi-pollutant capabilities.
- To the degree it can be accommodated, provide data and other support for essential science needs:
 - health/exposure studies
 - evaluation of new monitoring methods
 - characterization of atmospheric processes and source-receptor relationships (e.g., air quality model evaluation; source characterization techniques)

Attributes of the State/Local/Tribal Monitoring Networks

- To address state/local/tribal concerns not adequately addressed through NCore.
Examples include:
 - “hot spot” or mobile monitoring for air toxics
 - source-specific monitoring
 - community/environmental justice concerns
 - emissions reduction strategy assessments
 - tracking non-criteria pollutants of concern
 - NAAQS designation requests
 - enhanced monitoring as needed for local characterizations of key pollutants and/or their precursors
- To establish the highest priorities for state/local/tribal air monitoring needs and utilize local flexibility to shift resources to meet those needs, including the reduction of inefficient monitors and the addition of value-added monitors as necessary.
- To utilize data collected in meeting Attribute #1, above, such that the benefits of the NCore network can be enhanced.
- To meet federally-recommended monitoring objectives to the degree possible.

Basic Operating Principle

Zero Sum Game:

Cost (NCore) + Cost (State/Local/Tribal Networks) = Cost (Current Network)

(Revised 2/22/02)

National Strategy Committee:

Key Issues for Discussion

Preface: The NMSC Workgroup has identified key issues which will focus on the NCore component of the National Strategy. Each issue will include a statement of current thinking, followed by a series of questions. It is intended that the questions will stimulate thoughtful discussion at the face-to-face meeting on March 4-5.

1. Preservation of Basic Operating Principle (Funding Issues – Part 1)

Statement of current thinking:

Funding should include NCore and state/local/tribal monitoring needs, and a level of funding for local flexibility should be assured. Initially, such funding needs are to be met with existing grant funding levels, but areas of specific needs should be identified, and it is deemed appropriate to seek targeted additional funding to meet those specific monitoring needs.

Questions for discussion:

Do we want to set aside a certain level of available funding to assure state/local/tribal needs are met?

If so, should we set a specific level?

(e.g., 33% of grant funds; or assure that local match portions have no strings attached.)

Should the strategy be used as a mechanism for justifying additional funding for monitoring?

Should available funding be used to determine the NCore configuration? (e.g., number of sites, etc.)

2. What is an appropriate number of NCore Sites?

Statement of current thinking:

NCore sites should be defined based on meeting the objectives of the National Strategy to the degree possible, recognizing resource constraints. Considerations need to be given to important factors such as population, magnitude of pollution problems, diversity of pollutant conditions (e.g., high concentration areas vs. low concentration areas), transport corridors, and spatial representativeness.

Questions for Discussion:

a) For the urban and rural base network:

Do we want to discuss numbers?
Do we want to specify individual parameters?
Do we need regional/spatial/transport/background considerations?
Do we set maximum limits per responsible agency?
Do we want to specify “permanency” for these sites?

b) For the “adjunct” sites:

Do we base on a pollutant by pollutant basis?
Do we set a minimum/maximum number of sites?
Do we establish parameters for determining the number of sites?
(e.g., one or two highest sites; local/regional
representativeness, spatial characterization, etc)
Do we limit to criteria pollutants?
Should we establish fixed-in-time requirements?
(e.g., minimum # of years)

3. What should be monitored at NCore sites?

Statement of current thinking:

Base NCore sites should have a basic common structure, separate for urban sites and rural sites, and this structure should accommodate multi-pollutant measurements for criteria and non-criteria pollutants. Variations should be allowed where it makes sense to do so. Above the basic structure, certain designated sites should have augmented measurements for more comprehensive multi-pollutant measurements. [See EPA Draft Monitoring Strategy, Section 4, Table 1, Level 2] A limited subset should have the most comprehensive measurement capabilities (e.g., supersites) [See EPA Draft Monitoring Strategy, Section 4, Table 1, Level 1]. To the degree possible, existing multi-pollutant sites should be given priority as candidate NCore sites.

Adjunct sites should focus on key criteria pollutants such that important elements of characterizing the pollutant are captured (e.g., areas of maximum pollutant impact on the population; spatial mapping; transport corridors not accounted for in the base program.) [See EPA Draft Monitoring Strategy, Section 4, Table 1, Level 3]

Questions for discussion:

a) For the urban and rural base network:

Do we start with criteria pollutants and build upward?
Do we want a “standard” urban and “standard” rural configuration? Or a “minimum core?”
Do we want to initially limit to “proven off-the-shelf” equipment?
Do we want subset of upgraded “super” sites?
If so, how would such sites be chosen?
Would host agency be involved in the decision?
Do we want to maximize leveraging of existing networks (e.g., toxics, PAMS, PM speciation, IMPROVE, CASTNET)?

b) For the “adjunct” sites:

Should these be pollutant-specific sites?
Should these be multi-pollutant sites?
Do we want these to emphasize continuous monitors?

4. NCore vs NAMS/SLAMS

Statement of current thinking:

With the new strategy, and with the NCore approach, retaining the NAMS/SLAMS designations in its current form maintains linkages to the past structure. This should be an opportunity to re-create NAMS/SLAMS.

Questions for discussion:

Should NCore sites (base + adjunct) replace NAMS?
Do we want to replace the NAMS/SLAMS terminology?
Should NAMS (or other term) sites be more than NCore sites?
If so, do we lose local flexibility?
Should SLAMS (or other term) represent the flexible state/local Tribal networks?

5. Regulation changes:

Statement of current thinking:

The Regulatory Review Work Group is currently taking a comprehensive look at air monitoring regulations, in particular, 40CFR Part 58. Such changes need to be consistent with the objectives of the National Strategy, and should enable NCore and the local networks. There is not a current position on whether regulations should be more or less prescriptive.

Questions for discussion:

a) NCore:

Should NCore (and NAMS) be required in the regs?

If so, all of it, or just a portion? What portion?

Do we want less prescription in regulations and keep as much of the details as possible in guidance?

Should distinctions be made between “base” and “adjunct” sites?

Should mapping requirements be included?

Should specific QA/QC requirements be included for NCore?

Should meteorological measurements be required.?

If so, for base sites only? Or for both base and adjunct sites?

Should telemetering be required?

b) State/local/tribal sites:

Do we want this in regulation or guidance?

Do we want “backstop” level in regulations? (For those states that are bound by federal requirements and no more)

6. Policy-side considerations:

Statement of current thinking:

Policy elements have bearing on air monitoring network design and requirements (e.g., disinvestments in sites where there are attainment/nonattainment implications; maintenance area monitoring, etc.) We should identify the key policy issues and try to have the policies modified to the degree possible consistent with strategy objectives. Where such policy issues cannot be modified, we should know as early as possible what issues may affect the monitoring strategy, how they will affect the strategy, and how the strategy can best accommodate policy requirements.

Questions for discussion:

Should we concern ourselves with policy issues?
Should we identify policy issues and know policy implications
and constraints before moving any further with the
strategy? Or should we move in parallel?
What is the best way to handle policy issues?
Have input from policy folks to the NMSC?
Establish separate policy workgroup?
Should we assume policy issues can be overcome?

7. Implementation

Statement of current thinking:

Changing the air monitoring paradigm under the new strategy will affect most state/local agencies and tribes. We need to develop a systematic process which will provide for the most rapid implementation, but with the least impact on agencies/tribes and resources. This likely will be a phased-in approach covering anywhere from two to four years.

Questions for Discussion:

Should we provide for a phased-in approach?
If so, over what time period?
What is the best process to resolve implementation problems and issues?

8. Preservation of Basic Operating Principle (Funding Issues – Part 2)

Statement of current thinking:

We need to assure that the basic operating principal is preserved, and that there are periodic evaluations to make sure that this is the case.

Questions for discussion:

Do we want early assessments of “zero sum game”?
If so, how best to do this?
Do we want need specific time increments for such assessments?
How do we assure changes to reg requirements do not exceed
budgetary constraints?

02/22/02

QA Strategy

Progress Report

Completed -Since Oct Meeting

- < QA Strategy Report completed 1/16/02-Posted on AMTIC
- < Workgroup identified ~ 80 recommendations and action items- prioritized this list. Planning on using list as QA report card.
- < 1/31 QA Workgroup meeting - Reviewed list and identified action items to highlight for NMSC meeting

Future Activities -

- < Expand recommendation list to identify the how, who and when
- < OAQPS development of ambient air QA meeting to coincide with the 21st Annual National QA Meeting in Phoenix first week in April - Recommend attendance by QA Strategy Workgroup.
 - 1st half of day focus on QA Strategy
 - 2nd half day focus on DQO/DQA and AIRS related activity.
- < Look for Workgroup volunteers and/or others to help with review and rewrite of CFR Part 58 APP A,B and methods (as they relate to QC criteria) **for June deadline**
- < Implementation of as many recommendations (based on priority) as possible

QA Strategy Workgroup Specific Action Items

State and locals need to have a full time person for QA for the air monitoring programs

The Workgroup mentioned that within the SLT organization there needs to be a group or resource that understands QA and the quality system and is empowered to implement the quality system. The Workgroup will identify a minimum level of responsibilities for this individual in order to ensure consistency in implementing the ambient air quality system.

Review grant process to tie QA costs to monitoring costs.

The Workgroup felt we needed to provide a reasonable estimate of the cost of QA. This would entail identifying quality system elements for a typical SLT monitoring organization and provide an estimate of the costs of an adequate quality system. The Workgroup would use these estimates to ensure a consistent percentage of monitoring costs are allocated to the implementation of a quality system.

Ensure grant funding is available for QA related training

Similar to funding for AIRS training, the Workgroup thought QA training was important and in many cases being overlooked. As the Workgroup develops their cost of QA they will pursue a mechanism similar to that which makes AIRS training available.

NPAP funding through STAG is appropriate

The Workgroup endorsed the use of STAG resources to cover the NPAP program. STAG funds currently pay for the PM_{2.5} Performance Evaluation Program (PEP). The NPAP program is currently being re-invented to a through-the-probe audit process. The added costs to each State to implement this new program will be about 11K, however, the Workgroup will look at an equitable cost structure since some State audit programs may satisfy the definition of a performance evaluation program and therefore would not need NPAP.

Revise CFR to quarterly certifications

Due to the emphasis on real-time reporting, it was felt that data quality validation and evaluation is occurring earlier in the monitoring process than in the past. In addition, the QA Reports distributed by OAQPS (i.e., CY99 and CY00 PM_{2.5} QA Reports) have limited usefulness due to the fact that the data is not evaluated until after data is officially certified (6 months after the calendar year in which it was collected). The Workgroup felt that certifications could occur sooner and proposed a quarterly certification process.

Tribal Support

Recently some Tribes have asked for technical support including technical system audits be conducted on their monitoring programs. Some Regions may have difficulties addressing the needs of the Tribal monitoring organizations. The Workgroup will attempt to provide some recommendations to cover these additional resource needs.

FY2002 Ambient Air Toxics Monitoring Program

**Draft Guidance as developed by the
Air Toxics Monitoring Steering Committee**

Expected final date: March 1, 2002

DRAFT February 4, 2002
US EPA FY2002 State and Local Agency Grant Guidance and Allocation
National Air Toxics Monitoring Pilot Program

I. Introduction

This document contains the U.S. EPA's FY2002 grant guidance and allocation for the toxics ambient air monitoring program. The Agency is providing this information for use by U.S. EPA Regional Offices as well as State and local agencies as a planning and guidance tool for allocation of the FY2002 Air Toxics Monitoring Program grant monies. This guidance reflects a series of recommendations derived from meetings of the Air Toxics Monitoring Steering Committee, which consists of a group of EPA and State, interstate and local agency organizations. Related guidance information supporting and clarifying this Grant guidance includes the Air Toxics Monitoring Concept paper, the Draft Pilot Data Analysis Report, and the Stratified Network Design paper.

This grant guidance covers FY2002. For background (including documents noted above) on the Air Toxics Monitoring and Data Analysis work spanning the last two years, please refer to the following URLs:

<http://www.epa.gov/ttn/amtic/airtxfil.html>

<http://www.ladco.org>

A national air toxics trends monitoring network is being developed in conjunction with the National Air Monitoring Strategy. As the air toxics and general ambient air monitoring strategies are formulated, a common set of needs are being addressed on behalf of the ambient air monitoring community. The implementation of the toxics monitoring network should recognize the goals and objectives of the national monitoring strategy as these funds are allocated.

II. Grant Funding

For FY2002, \$3 million in State and Tribal Assistance Grants (STAG) funds have been appropriated to support national air toxics monitoring activities. Based on the Air Toxics Monitoring Steering Committee's recommendations and the approval of the STAPPA/ALAPCO Board of Directors, these funds will be used to establish CAA Section 103 cooperative agreements to support completion of data analysis on the original, FY2000, ten pilot city projects, perform an inter-comparability laboratory study, establish an initial, 10 site trends network, aid existing air toxic monitoring efforts for 40 states, and assist three, FY2000 pilot sites to continue or enhance measurements.

III. Projected Activities

The grant funds are expected to support the following activities during FY-2002:

Overall Data Analysis: \$430,000 will be used for extensive data analysis of the 12-month data set for 10 pilot cities as listed here. It is anticipated that valuable information from this analysis will yield answers on whether an extensive national network is needed, along with general information on monitor siting, appropriate pollutants to measure, and spatial variability.

- Providence, RI
- Detroit, MI
- Barceleneta and San Juan, Puerto Rico
- Tampa FL
- Keeney Knob, WV
- Rio Rancho, NM
- Cedar Rapids, IA
- Grand Junction, CO
- San Jacinto, CA
- Seattle WA

These funds are to be directed to LADCO to manage these activities. These funds will also support a second, Data Analysis workshop tentatively scheduled for October, 2002, and development of a final report due Spring of 2003. (See Attachment 1).

Trends Sites

Trends sites (one per Region) will be chosen by the Steering Committee, from the attached list of candidate sites (Attachment 2). These sites have been selected based on a statistical approach of averaging ambient concentration levels separately per Region, using urban and rural data sets (Attachment 3). Input from the Regional representatives and state and local agencies is encouraged when choosing the respective site. In addition, funding of \$20,000 will be awarded to each of the selected trends grantees, through carryover FY2001, S103 PM2.5 monitoring grants. These funds are to be used for purchase of an aethalometer, to aid in obtaining diesel indicator data. Also, each trend site is to be situated at a PM2.5 speciation site, which will provide even more data on the relationship of particulate and toxic pollutants.

- *Equipment:* FY-2002 grant funds are minimal per project, thus are not intended for equipment purchases other than minor upgrades, except for the purchase of an aethalometer with PM2.5 funding as described above.
- *Pollutants:* The grantee is expected to conduct the analysis of the air toxics target compounds using the methods listed in the Measurement Summary at:

<http://www.epa.gov/ttn/amtic/files/ambient/airtox/toxics2a.pdf>

Preliminary data analysis of the data archive, along with identification of the highest cancer risks (as extracted from the 1996 National Air Toxics Assessment (NATA) findings) resulted in the following pollutants of concern. Thus at a minimum, these funds shall be used for the measurement of:

Benzene
Acrolein
Formaldehyde
Chromium compounds

It is recognized that the current method for acrolein capture is inadequate. Presently, there is an opportunity to field demonstrate a promising new method of acrolein capture, in conjunction with the Office of Research and Development (ORD), US EPA. This demonstration entails using both a DNSH cartridge and a DNPH cartridge. Funding for the DNSH cartridge will be provided by the US ORD. All trends site grantees are encouraged to communicate their interest in demonstrating this new technology to the Steering Committee.

- *Sampling Duration and Frequency:* Sampling should begin in late FY2002 or early FY2003 and is to extend for at least 12 consecutive months. Sampling will be conducted on at least a once every 12-day schedule. More frequent sampling is strongly encouraged and is dependent on existing infrastructure at the selected site
- *Data Management/Reporting:* The State or Local agency will prepare and transfer the measured data together with any associated QA information to the Aerometric Information Retrieval System (AIRS). All measurements are to be transferred to AIRS no later than 120 days following the end of each calendar quarter.
- *Quality Assurance:* It is recognized that these funds are not adequate for a complete quality assurance program. However, since these funds are geared toward enhancement of a current air toxics site, all QA plans associated with that site must be reported to the Regional air toxics representative. At a minimum, all plans are required to have a quality assurance project plan (QAPP) which among other items will address procedures for quantifying measurement precision and bias either through collocated measurements or sampling methods. The grantee is directed to the following URL which includes the model QAPP to be followed by the grantee, if a QAPP has not already been developed for the site:

<http://www.epa.gov/ttn/amtic/files/ambient/airtox/atqapp1.pdf>

In addition, measurement methods shall be followed according to the "Pilot City Air Toxics Measurement Summary, EPA/454/R-01-003 which can be found at the following link:

<http://www.epa.gov/ttn/amtic/files/ambient/airtox/toxics2a.pdf>

- *Meteorological Monitoring:* Surface, (10m) meteorological monitoring for wind speed, wind direction, sigma-theta, temperature and humidity is required. (It is expected that the existing infrastructure will contain the apparatus for these measurements.) If a site is proximate to an existing State or National Weather Service (NWS) site and these data are accepted as representative of the meteorology at the monitoring site, then the existing data may be substituted for on-site meteorological monitoring. All met data must be entered into AIRS.
- *Emissions Inventory:* Each site selected must be either already included in the area's present 1999 emission inventory, or planned, 2002 emission inventory. This inventory should include facility and process level (i.e., Source Classification Code (SCC) data. For more information, contact Anne Pope, Emission Factors and Inventory Group (EFIG) at 919/541-5373.

Remaining Allocation

- FY2001 Contingency Fund. Carryover contingency funds of \$9000 are allocated to the State of West Virginia to purchase a carbonyl sampler. The Keeney Knob, WV site is an original, FY2000 pilot project. Carbonyl data from this site is necessary to complete the overall pilot data analysis.
- Non-trends sites. An allocation of \$40,000 will be made to each of the 50 states. These funds are to be used for air toxics monitoring related activities. Intra-state negotiations must be conducted between states and local agencies to decide on their chosen project. If any state/local agency choose NOT to accept the \$40,000 grant, then funding will revert back to the Steering Committee to be earmarked for more trends sites. Please note 10 of these 50 states/local agencies will also be chosen (*from the list in Attachment 2*) for their participation in the trends network and will be subject to the protocols listed in (III) above.
- Aethalometer Purchase. Each of the 10 trends sites chosen shall receive \$20,000 from S103 PM2.5 grant funds for purchase of an aethalometer.
- Table 1 lists all parts of this allocation.

IV. Projected Grants Distribution

Table 1. Grant Funding Distribution

Line Item	Funding (K)
1. Analysis of the pilot city data. See attached "Air Toxics Monitoring Data: Analyses and Network Design Recommendations".	430
2. Lab inter-comparability study managed through the Urban Air Toxics Monitoring Program (UATMP).	50
3. To be distributed equally among 50 state and local agencies (maximum of \$40K each) for air toxics monitoring and data analysis. Each site must be part of an existing monitoring site, or a funding commitment must be made on behalf of the state/local to bring the site to complete operation. The state shall have a consultation process with local air agencies on how this funding should be spent (see "Non-trends Sites" paragraph above.)	2,000
4. To be distributed among trends sites (approximately 10 sites chosen by the Steering Committee from the candidate listing in Attachment 1), with input from state, local, and US EPA Regional toxics monitoring representatives. These additional funds are to be added to allocation discussed in part (3) of this table, at \$40,000 each. Thus, each trend site will receive \$80,000.	400
For ongoing pilot city work at existing pilot Seattle and Tampa sites. Total allocation to Seattle = \$89,000, total allocation to Tampa for purchase of two carbonyl samplers and associated analyses = \$34,000. (Additional funding needed over the \$120,000 to be distributed from the FY2001 contingency fund.)	120
TOTAL FY2002 allocation	\$3000

Use of Carry-over FY2001 Funds:

Purchase of a carbonyl sampler for the Keeney Knob, WV site-these are FY2001 contingency monies and are to be added to any FY2002 funding allocation for WV.	9
Purchase of an aethalometer for use at each of the 10 selected trends sites (\$20,000 each)	\$200
TOTAL FY2001 allocation	\$209

Intent for use of funds must be received from each state or local agency within 45 days of receipt of this grant guidance. Any funds not claimed will revert back to the Steering Committee for further trends project selections.

For trends sites only: A short statement listing the grantee's commitment to follow protocols outlined in (III) above for trends sites is required.

V. Candidate Air Toxics Ambient Monitoring Trends Sites

As discussed in (III) above, Attachment 1 contains a listing of candidate sites for the initial National Ambient Air Toxics Monitoring Trends Network. This listing is based on a statistical analyses of averaging urban regional areas and rural regional areas.

VI. Schedule of Activities

Grant Guidance Distributed to Region	March 1, 2002
States/local agencies submit their Plan	April 15 or 45 days after receipt of Grant guidance
Steering Committee/State/Local Area/ Regional negotiation	May 2002
Grant Allocation Made	May/June 2002
State/local QAPP approved for Trends Sites	August 2002
Initiate monitoring	October 2002-January 2003
Data Analysis Workshop	Fall, 2002
Final Pilot Project Data Analysis Report (with recommendations for comprehensive network design)	Spring 2003

Attachments:

Attachment 1. Summary of Candidate Trends Sites (DRAFT FEBRUARY 2002).

